IN THE CLAIMS

1. (currently amended): An image forming apparatus comprising:
an image forming unit for forming an image on one side of a recording medium;
a transport unit for transporting the recording medium through the image forming unit at an image forming transport speed;
a sensor for sensing the type of recording medium transported by the transport unit;
a return unit for receiving the recording medium from the image forming unit, transporting the recording medium on a return path that reverses the orientation of the recording medium, and feeding the recording medium into the image forming unit again, so that the image forming unit can form an image on another side of the recording medium; and
a control unit for setting different transport speeds for different types of recording media on at least part of the return path, according to the type of recording medium sensed by the sensor while the recording medium is being transported by the transport unit, and controlling the return unit so that the different types of recording media are transported at the different speeds,
wherein the control unit ~~determines~~ keeps the image forming transport speed constant, and ~~according to the type of the recording medium sensed by the sensor while the recording medium is being transported by the transport unit, and~~ controls the return unit so that the recording medium is transported on at least part of the return path at a speed differing from the image forming transport speed.

2. (original): The image forming apparatus of claim 1, further comprising a media thickness sensor for sensing thickness of the recording medium, wherein the control unit sets the transport speed on said at least part of the return path according to the sensed thickness of the recording medium.

3. (original): The image forming apparatus of claim 2, wherein the control unit reduces the transport speed on said at least part of the return path for recording media of greater than a predetermined thickness.

4. (original): The image forming apparatus of claim 1, further comprising a media stiffness sensor for sensing stiffness of the recording medium, wherein the control unit sets the transport speed on said at least part of the return path according to the sensed stiffness of the recording medium.

5. (original): The image forming apparatus of claim 4, wherein the control unit reduces the transport speed on said at least part of the return path for recording media of greater than a predetermined stiffness.

6. (original): The image forming apparatus of claim 1, further comprising a fuser for fusing the images formed by the image forming unit onto the recording medium and a fusing temperature control module for controlling a fusing temperature of the fuser, wherein the control unit sets the transport speed on said at least part of the return path according to the fusing temperature.

7. (original): The image forming apparatus of claim 6, wherein the control unit reduces the transport speed on said at least part of the return path if the fusing temperature is higher than a predetermined temperature.

8. (original): The image forming apparatus of claim 1, wherein the control unit sets the transport speed on said at least part of the return path according to a speed at which the transport unit transports the recording medium through the image forming unit.

9. (original): The image forming apparatus of claim 1, wherein the control unit reduces the transport speed on said at least part of the return path if the speed at which the transport unit transports the recording medium through the image forming unit is slower than a predetermined speed.

10. (original): The image forming apparatus of claim 1, further comprising a control panel, wherein the control unit sets the transport speed on said at least part of the return path according to information entered from the control panel.

11. (original): The image forming apparatus of claim 1, wherein the image forming apparatus receives control information from a host device, and the control unit sets the transport speed on said at least part of the return path according to the control information received from the host device.

12. (original): The image forming apparatus of claim 1, wherein the return path comprises a first part for reversing a transport direction of the recording medium and a second part for feeding the recording medium into the image forming unit.

13. (original): The image forming apparatus of claim 12, wherein the part of the return path on which the control unit sets different transport speeds for different types of recording media includes said first part.

14. (original): The image forming apparatus of claim 12, wherein the part of the return path on which the control unit sets different transport speeds for different types of recording media includes said second part.

15. (original): The image forming apparatus of claim 12, wherein the return path includes a third part disposed between the first part and the second part, and the control unit sets a single transport speed for all types of recording media in the third part of the return path.

16. (original): The image forming apparatus of claim 1, wherein the transport unit transports the recording medium through the image forming unit at a first speed and said different transport

speeds include a second speed faster than the first speed and a third speed slower than the second speed.

17. (original): The image forming apparatus of claim 16, wherein the third speed is equal to or greater than the first speed.

18. (previously presented): An image forming apparatus comprising:
an image forming unit for forming an image on one side of a recording medium;
a transport unit for transporting the recording medium through the image forming unit;
a return unit for receiving the recording medium from the image forming unit, transporting the recording medium on a return path that reverses the orientation of the recording medium, and feeding the recording medium into the image forming unit again, so that the image forming unit can form an image on another side of the recording medium;
a control unit for setting different transport speeds for different types of recording media on at least part of the return path, and controlling the return unit so that the different types of recording media are transported at the different speeds; and
a fuser for fusing the images formed by the image forming unit onto the recording medium and a fusing temperature controller for controlling a fusing temperature of the fuser, wherein;
the transport unit transports the different types of recording media through the image forming unit at different image forming transport speeds; and
the control unit compares the image forming transport speed of the recording medium with a first speed, compares the fusing temperature with a predetermined temperature, selects a second speed faster than the first speed if the image forming transport speed is equal to or greater than the first speed and the fusing temperature is less than the predetermined temperature, selects a third speed slower than the second speed if the image forming transport speed is less than the first speed or the fusing temperature is equal to or greater than the predetermined temperature, and sets the selected second or third speed for said at least part of the return path.
Claim 19 (previously presented): An image forming apparatus comprising:

an image forming unit for forming an image on a recording medium;
a transport path on which the recording medium is transported, the transport path including a first part with a first radius of curvature and a second part with a second radius of curvature smaller than the first radius of curvature;
a transport unit for transporting the recording medium on the transport path; and
a control unit for setting different transport speeds for a single recording medium on different parts of the transport path, the speed set for the first part differing from the speed set for the second part.

Claim 20 (previously presented): The image forming apparatus of claim 19, wherein the speed set for the first part is greater than the speed set for the second part.